

RADIO CORPORATION OF AMERICA  
RCA INTERNATIONAL DIVISION



CENTRAL & TERMINAL AVES.  
CLARK, NEW JERSEY U. S. A.

RADIOGRAM ADDRESS  
RADIOINTER, CLARK

February 19, 1965

Mr. John Collins, Director  
Scientific & Electronic Equipment Div.  
Office of Export Control  
U. S. Department of Commerce  
Washington, D. C. 20230

Dear John:

PART A

The following information is being presented in response to your request of February 15 to provide a list of the kinds of equipment that might be required by the Soviet Bloc countries if they are to adopt the United States system of color television. The following list includes representative examples of the equipment they would have to purchase outside the Bloc if the NTSC system is to be adopted:

<u>Equipment</u>	<u>Catalog Sheet</u>
<u>TV TAPE RECORDERS</u>	
Deluxe TV Tape Recorder, Type TR-22	B.3256
Television Tape Recorder, Type TR-4	B.3259
Color ATC Equipment	B.32721
<u>COLOR TV CAMERAS</u>	
Transistorized Live Color Camera, Type TK-42	B.2000
Solid State Synchronizing Generator Equipment, Type TG-3	B.3401
17-Inch Color Monitor, Type TM-27	B.2404
3-Vidicon Color Film Camera Equipment, Type TK-26C	B.3010
Universal Multiplexer, Type TP-15	B.3169
Professional Slide Projector, Type TP-7A	B.3151
Light Control Units	B.30611

**\*DOC Exemption Letter In EUR File\***

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TV TERMINAL EQUIPMENT

Custom Television Equipment	B.2254
Video Switching Equipment, Type TS-40	B.2301-1
Video Distribution Amplifier, Type TA-33	B.2612

TEST EQUIPMENT

Selected types of test equipment used in color TV.

Color Bar Generator, Type WA-1E	B.6052
Vectorscope, Type 526	B.6057
Linearity Checker, Type WA-7C	B.60641
Calibration Pulse Generator, Type WA-9A	B.6070
Television Oscilloscope, Type TO-524AD	B.61021
Television Oscilloscope, Type TO-1	B.61041

TV CAMERA TUBES

Used in camera TK-42

Type similar to 7295B Image Orthicon	7295B
Type similar to 8134 Vidicon	8134

Used in camera TK-26C.

Type 7038 Vidicon	7038
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COLOR PICTURE TUBES

Types 25AP22 and 25BP22	25AP22, 25BP22
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PART B

You asked for our comments regarding the kinds of equipment with respect to which the Soviet Bloc countries would need technical assistance if they are to commence production of the necessary equipment. If the Soviet Bloc countries intend to manufacture any of the equipment listed in PART A, it is RCA's opinion that technical assistance will be needed in varying degrees. It should be noted that the business of marketing technical assistance is a very competitive one and that such assistance is available from numerous sources, both within and outside the United States.

TV TAPE RECORDERS - This equipment is already being produced in the Soviet Union and, therefore, only limited assistance will be needed by the USSR to produce color television tape recorders. However, as Bloc countries seem to be particularly interested in the quality of their color television broadcasting, some technical assistance will probably be required to enable Bloc countries to meet the broadcast quality now achieved in the United States.

COLOR TV CAMERAS - The Soviet Union is already engaged in producing prototype color television cameras and, therefore, very little technical assistance will be required by Bloc countries to produce color television cameras. However, as previously stated, since Bloc countries seem to be particularly interested in the quality of their color television broadcasting, some technical assistance will probably be required to enable Bloc countries to meet the broadcast quality now achieved in the United States.

TV TERMINAL EQUIPMENT - As this category of equipment, when produced in the United States, is different in detail and refinement only from similar equipment produced and used in Soviet Bloc countries, technical assistance concerning this equipment will probably not be required. Further, as the level of control applying to this Special Provisions List "B" equipment would be unlikely to preclude the granting of validated licenses for the exportation of this equipment and technical data, the discussion of this question is academic.

TEST EQUIPMENT - This category of product is not considered in detail here as it is collateral to the immediate question. The supply of test equipment or technical data concerning the production of test equipment may be required or not, depending on the course of negotiation.

TV CAMERA TUBES - As camera tubes produced in the western world are considered to be better than similar product produced in the Bloc, technical assistance will probably be required for this product.

COLOR PICTURE TUBES - Although the Soviet Union has produced prototype color kinescopes, Soviet Bloc countries do not seem to have achieved production line volume. Of course, as color television is not in use in any Bloc country, the reason for this may be a lack of demand for the product. It is believed that a full line of technical assistance will be required before any significant volume of production of color kinescopes can be achieved in Bloc countries.

PART C

In addition to the foregoing information, you requested comments as to where, in our opinion, the Soviet Union might obtain equipment and technical assistance, other than in the United States.

TV TAPE RECORDERS - These equipments in black and white versions are presently being produced by at least six manufacturers outside the United States. Japan has achieved substantial volume and is selling recorders in the export market. The conversion from black and white recording to color recording is not considered a difficult step for a manufacturer who has achieved the capability to produce black and white television tape recorders.

COLOR TV CAMERAS - Television cameras are being produced in a number of countries, notably in the United Kingdom, Japan, France, West Germany and the Netherlands. Color cameras have been manufactured in Japan. Although there is no significant production of color television cameras, all these countries are working on prototypes and could have production models available quickly should a demand develop. Likewise, if the technical data covering production of color television cameras were requested by Bloc countries, any of the producing countries could be in a position to supply assistance shortly after a requirement developed.

TV TERMINAL EQUIPMENT - This category of product is presently being manufactured in most industrial countries. As only slight differences exist between black and white and color television regarding terminal equipment, any of the countries now in business could develop a capacity to market product and technical assistance promptly if a demand developed.

TEST EQUIPMENT - High quality test equipment is presently available in many countries, particularly in West Germany, Switzerland, Sweden, Japan, Italy and the United Kingdom. Any of these countries could supply equipment and technical assistance concerning the manufacture of such product to the extent that such equipment might be needed by Soviet Bloc countries to establish a color television industry.

TV CAMERA TUBES - High quality units are presently available in Japan, England, West Germany, the Netherlands, Italy, France and the United Kingdom. Any of these countries could supply the product and technical assistance that might be needed by Soviet Bloc countries to produce or service color television cameras or to establish a television camera tube industry.

COLOR PICTURE TUBES - This commodity is presently being manufactured in the United States, Japan and Canada. However, other countries, including the Soviet Union, have produced prototypes and have been experimenting with color kinescopes on a laboratory basis for some time. If the Soviet Union is to develop a volume production of color kinescopes, technical assistance will be required and, most likely, that assistance will need to come from the United States.

PART D

You inquired by telephone on February 18 about a recorder known as type TR-4-CVR. A catalog sheet covering such a recorder was published by RCA last year. However, the type has never been manufactured, and, therefore, no recorders type TR-4-CVR have been sold. Actually, what our product people had in mind when announcing the TR-4-CVR was a unit built with a TR4 chassis, but considerably modified from the commercial type TR-4. A catalog sheet describing this proposed recorder was given to you last year at the time comprehensive data was made available to assist your evaluation of RCA's television tape recorders. You made that study after receiving our Mr. Odorizzi's letter of September 9, 1964.

We hope you will find the foregoing information of assistance to the report you are preparing for the Secretary.

Sincerely,



W. L. Newell, Manager  
Order Processing Administration

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Encl.

TOP SECRET  
SECRET

CENTRAL INTELLIGENCE AGENCY  
CODEWORD ROUTING SHEET

TO		INITIALS	DATE
1			
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<input type="checkbox"/> Approval	<input type="checkbox"/> Information	<input type="checkbox"/> Signature
<input type="checkbox"/> Action	<input type="checkbox"/> Direct Reply	<input type="checkbox"/> Return
<input type="checkbox"/> Comment	<input type="checkbox"/> Preparation of Reply	<input type="checkbox"/> Dispatch
<input type="checkbox"/> Concurrence	<input type="checkbox"/> Recommendation	<input type="checkbox"/> File

REMARKS:

GROUP I  
Excluded from automatic downgrading  
and declassification

APPENDED DOCUMENT CONTAINS CODEWORD MATERIAL

Appended document contains classified information within  
the meaning of Section 798, Title 18, United States Code.

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